Air Force Research Laboratory|AFRL

Science and Technology for Tomorrow's Air and Space Force

Success Story

DR. MIGUEL VISBAL RECEIVES ASC OUTSTANDING ENGINEER AND SCIENTIST AWARD

The Affiliate Societies Council (ASC) of the Engineering and Science Foundation recently recognized Dr. Miguel Visbal, a principal research engineer in the Air Vehicles Directorate, for scientific achievements in the computational simulation of unsteady aerodynamics, aeroelasticity, aeroacoustics, and electromagnetics. His selection enhances AFRL's reputation as a world leader in aerospace research and recognizes the skill and professionalism of directorate scientists and engineers.

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Accomplishment

The ASC of the Engineering and Science Foundation recognized Dr. Visbal as one of the recipients of the 2003 Outstanding Engineers and Scientists Award. ASC presented the award at the 44th Annual Awards Banquet during Engineers and Scientists Week in Dayton, Ohio. Dr. Visbal was one of four awardees that received special recognition for his ingenious contributions in the Research category.

Background

The ASC of the Engineering and Science Foundation consists of members from nearly 50 professional science and engineering organizations whose combined membership in Dayton exceeds 15,000. The mission of ASC includes continuing professional education, career guidance, outreach for technology and knowledge sharing in the community, and administrative services for affiliated groups. Each year during Dayton's Engineers and Scientists Week, the ASC honors outstanding contributors in the areas of Research, Technical Leadership, Education, and Engineering Design and Development.

Dr. Visbal is the team leader for Multidisciplinary Computational Research in the directorate's Computational Sciences Center of Excellence. During his career, he obtained and published significant first-ever results for the fundamental physics that dictate unsteady, separated aerodynamic flows including vortex breakdown and dynamic stall.

Dr. Visbal recently conducted pioneering research in the formulation of accurate, high-order numerical schemes for computational fluid dynamics. Researchers are using his developments in the computational simulation of fluid-structure interactions, turbulence, and magneto-gas dynamics.

Dr. Visbal is a recognized contributor in his field as evidenced by his membership on international committees and review teams. The National Aeronautics and Space Administration (NASA) invited him to serve on a NASA Peer Review Panel, and he also served as a general chairman during an international conference. He is a reviewer for numerous international journals and served as a National Science Foundation consultant as well as an adjunct faculty member at the Air Force Institute of Technology, Wright State University, and Ohio Aerospace Institute.

Dr. Visbal's basic research team receives nearly $1M annually from the Air Force Office of Scientific Research (AFOSR) as well as hundreds of thousands of computer processor hours from the Department of Defense High-Performance Computing Modernization program resources. His team received renewal status as a prestigious AFOSR Star Team for the period 2002-2004.

Additional information

To receive more information about this or other activities in the Air Force Research Laboratory, contact TECH CONNECT, AFRL/XPTC, (800) 203-6451 and you will be directed to the appropriate laboratory expert. (03-VA-02)

Air Vehicles
Awards and Recognition